

AMENDMENT TO THE CLAIMS

The following is a detailed listing of all claims that are, or were, in the Application.

1-14. (Canceled)

15. (Currently amended) A method implemented by an apparatus including a storage device and a controller for processing user history data stored in the storage device, the method comprising:

storing, in the storage device, a hierarchical data structure for describing user history, the hierarchical data structure including

(a) a user information element to identify a user,

(b) a first user action history of the user as a first structural element of the hierarchical data structure, the first user action history including

(b-1) a first data protection attribute to specify whether all information in the first user action history is protected or not, and

(b-2) a first list of user action items for describing ~~a first aspect of~~ the user's multimedia consumption including skipping or slow playing a piece of content, and

(c) a second user action history of the user as a second structural element at the same level of the hierarchical data structure as the first structural element, the second user action history including

(c-1) a second data protection attribute to specify whether all information in the second user action history is protected or not, and

(c-2) a second list of user action items for describing ~~a second aspect of~~ the user's media consumption including playing or recording a content stream,

wherein each user action item in both the first and second lists records a corresponding action of the user's consumption of content from a respective multimedia program and has (i) an action time indicating when the corresponding action of the user took place and (ii) a unique content reference identifier that identifies the consumed multimedia program independent of the multimedia program's location and enables access to content

related metadata that is not provided in the user history; and

~~recording, in the first list of user action items, a first user action item corresponding to a first user action by the user, wherein the first user action is related to the first aspect of the user's multimedia consumption and includes skipping or slow playing a piece of a first multimedia program having a first unique content reference identifier that identifies the first multimedia program independent of its location, wherein the recorded first at least one user action item in the first list of user action items includes the first unique content reference identifier and timing information for identifying the skipped or slow played piece of content the first multimedia program; and~~

~~using the first data protection attribute for specifying that information recorded in the first user action item about the first user action is protected in the first user action history.~~

16. (Canceled)

17. (Previously presented) The method for processing user history data as claimed in claim 15, wherein each unique content reference identifier is a content reference ID (CRID) of a Content ID Forum (CIDF).

18. (Currently amended) The method for processing user history data as claimed in claim 15, wherein the second user action history describes ~~the aspect of~~ the user's consumption type and includes data that represents a ~~first~~ consumption type indicating how the user consumed content from the ~~first~~ respective multimedia program.

19. (Canceled)

20. (Currently amended) The method for processing user history data as claimed in claim 15, wherein the first user action history describes ~~the aspect of~~ the user's

consumption behavior and includes data that represents a consumption behavior with respect to the ~~first~~ respective multimedia program.

21. (Previously presented) The method for processing user history data as claimed in claim 20, wherein the data that represents the consumption behavior indicates a selection from an action type group including operations of normal play, skip, replay, and slow play.

22. (Currently amended) A method implemented by an apparatus including a storage device and a controller for processing user history data stored in the storage device, the method comprising:

storing, in the storage device, a hierarchical data structure for describing user history, the hierarchical data structure including

(a) a user information element to identify a user,

(b) a first user action history of the user as a first structural element of the hierarchical data structure, the first user action history including

(b-1) a first data protection attribute to specify whether all information in the first user action history is protected or not, and

(b-2) a first list of user action items for describing ~~a first aspect of~~ the user's multimedia consumption including skipping or slow playing a piece of content, and

(c) a second user action history of the user as a second structural element at the same level of the hierarchical data structure as the first structural element, the second user action history including

(c-1) a second data protection attribute to specify whether all information in the second user action history is protected or not, and

(c-2) a second list of user action items for describing ~~a second aspect of~~ the user's media consumption including playing or recording a content stream,

wherein each user action item in both the first and second lists records a

corresponding action of the user's consumption of content from a respective multimedia program and has (i) an action time indicating when the corresponding action of the user took place and (ii) a unique content reference identifier that identifies the consumed multimedia program independent of the multimedia program's location and enables access to content related metadata that is not provided in the user history;

~~recording, in the first user action history, a first user action item having a user action type and including a first unique content reference identifier that identifies a first multimedia program independent of its location, the user action type representing a type of action that is related to consumption of content from the first multimedia program and includes an operation of skip or slow play; and~~

~~assigning a protection value to the first data protection attribute to protect information in the recorded first user action item, the protection value specifying that all information recorded in the first user action history is protected.~~

23. (Currently amended) The method for processing user history data according to claim 22, wherein the second user action history describes ~~the aspect of~~ the user's consumption type and includes data that indicates how the user consumed content from the ~~first~~ respective multimedia program.

24. (Currently amended) The method for processing user history data according to claim 22, wherein the first user action history describes ~~the aspect of~~ the user's consumption behavior, and the user action type indicates a selection from an action type group including operations of normal play, skip, replay, and slow play.

25-30. (Canceled)

31. (Currently amended) The method of claim 15, wherein ~~recording the first~~

~~user action item includes storing the first user action item in~~ the storage device includes a
portable medium.

32-33. (Canceled)

34. (Currently amended) The method of claim 15, wherein ~~storing the~~
~~hierarchical data structure includes storing the hierarchical data structure in~~ the storage
device includes a smart card.

35. (Previously presented) The method of claim 22, wherein storing the
hierarchical data structure includes storing the hierarchical data structure in a smart card.